

## Market Potential for U.S. Distillers' Grains Exceeds Likely Supply Growth

U.S. production of distillers' grains (DGs), which include a range of animal feed co-products derived from corn-based dry-mill ethanol production, has quadrupled since 2004/05, paralleling the rapid growth of U.S. ethanol production. Despite initial concerns about the capacity of domestic or foreign livestock feeders to utilize DGs, they are now the second largest category of processed feed used in the U.S., amounting to an estimated 29.1 million metric tons (mmt) in 2010/11. ERS projections point to further growth in DGs production. For the foreseeable future, however, potential feed use of DGs in the U.S. exceeds projected supply.

Initially, observers questioned the industry's ability to process and market a high-quality, storeable DGs product and the degree to which the nutritional characteristics were suited to certain types of livestock/

poultry. Nevertheless, both domestic and international feeders rapidly adopted DGs, which possess at least the same energy as corn and protein content between that of corn and soybean meal. All livestock and poultry can use the nutrients from DGs, but beef and dairy cattle (ruminants) can use them more readily than hogs and poultry (monogastrics). Furthermore, technological advances are making it possible to change the composition of DGs and tailor them to the nutrient needs of each type of animal.

As much as one-quarter of U.S. DGs supply has been exported, which will support continued growth in DGs use. Main markets include China, Mexico, and Canada. Exports have benefited from technical assistance from U.S. trade groups.

ERS researchers developed a methodology to compute the U.S. supply, as well as

actual and potential feed use of DGs. Based on midrange diet inclusion rates suggested by animal nutritionists for different types of livestock and poultry, the analysis shows that potential feed use of DGs could have averaged 62 mmt during the past 5 years, far above estimated actual domestic DGs feed consumption of 29.1 mmt and supply of 37.4 mmt for 2010/11. With production growth of corn-based ethanol and corresponding DGs expected to slow in the next 10 years and with exports of DGs expected to grow, actual domestic feed use of DGs projected for 2020/21 is only about half the projected potential feed use demand of 64 mmt. **W**

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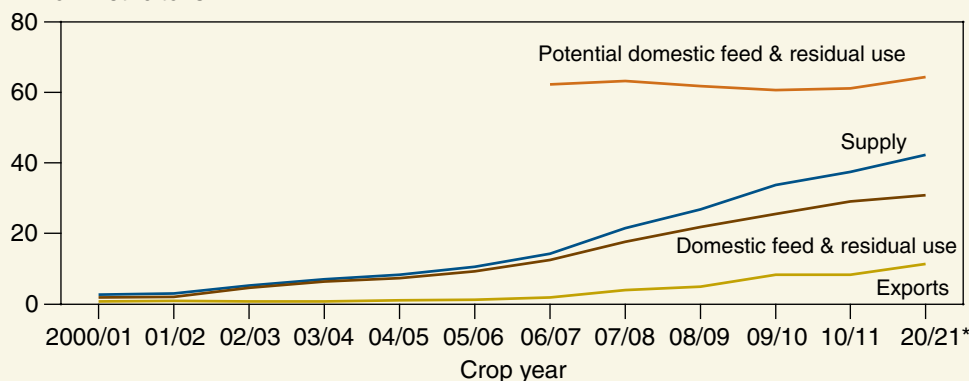
### This finding is drawn from ...

*Market Issues and Prospects for U.S. Distillers' Grains Supply, Use, and Price Relationships*, by Linwood A. Hoffman and Allen Baker, Outlook Report No. FDS-10K-01, USDA, Economic Research Service, December 2010, available at: [www.ers.usda.gov/publications/fds/2010/11nov/fds10k01/](http://www.ers.usda.gov/publications/fds/2010/11nov/fds10k01/)

*Estimating the Substitution of Distillers' Grains for Corn and Soybean Meal in the U.S. Feed Complex*, by Linwood A. Hoffman and Allen Baker, Outlook Report No. FDS-11-I-01, USDA, Economic Research Service, October 2011, available at: [www.ers.usda.gov/publications/fds/2011/09sep/fds11i01/](http://www.ers.usda.gov/publications/fds/2011/09sep/fds11i01/)

### Potential feed use of distillers' grains in the U.S. exceeds supply

Million metric tons



\*Projected.

Source: USDA, Economic Research Service, updated calculations from Hoffman and Baker (2010, p. 5) and Hoffman and Baker (2011) and USDA, *World Agricultural Supply and Demand Estimates*, September 12, 2011, and *USDA Agricultural Projections for 2011-20*, February 2011.